

PATENT

Amendment(s) to the Claims

Please amend the claims to read as follows. *Note that all claim numbers are indicated consistent with the Examiner's renumbering in a prior action.*

29. (Original) A context switch controller in a processor that includes an operand data storage for holding data operated upon by instructions executing on the processor, the operand data storage being divided into a plurality of storage groups containing one or more storage elements, the context switch controller comprising:

a dirty bit storage including one or more storage bits that correspond to one or more respective storage groups in the operand data storage; and

a dirty bit logic coupled to the dirty bit storage and coupled to receive a destination address field of the instructions, the dirty bit logic responsive to an executed instruction by classifying a destination access as a targeted storage group according to information in the destination address field of the executed instruction and by evaluating the classified destination based on whether the instruction updates the targeted storage group.

30. (Cancelled)

31. (Cancelled).

32. (Cancelled).

33. (Currently Amended) A context switching logic in a processor that includes an executive storage for holding operand data operated upon by instructions executing on the processor, the executive storage being divided into a plurality of storage groups containing one or more storage elements, the context switching logic comprising:

means for utilizing a dirty bit storage including a plurality of storage bits corresponding

to a plurality of respective storage groups in the executive storage;

means for receiving a destination address field of the executing instructions;

PATENT

means for responsive to an executed instruction, classifying a destination access as a targeted storage group according to information in the destination address field of the executed instruction; and

means for evaluating the classified destination based on whether the instruction updates the targeted storage group; and

~~means responsive to a context switch for saving storage groups based on the evaluation of the classified destinations.~~

34. (Cancelled)

35. (Currently Amended) ~~The context switch controller of claim 34~~ A context switch controller in a processor comprising:

a data storage unit divided into a plurality of storage groups;

a dirty bit storage coupled to the data storage and including one or more storage bits

corresponding to one or more respective storage groups in the data storage unit;

and

a dirty bit logic coupled to the dirty bit storage and configured to receive a destination

address of one or more instructions executing on the processor, wherein the dirty

bit logic is responsive to one or more instructions executed on the processor

to:

classify a destination access as a targeted storage group according to information

in a destination address field of the one or more instructions executed on

the processor; and

evaluate the classified destination address based on whether the instruction

updates the targeted storage group.

36. (Cancelled)

37. (Currently Amended) The context switch controller of claim 34 35, wherein the data storage unit is configured to hold data operated by the one or more instructions executed on the processor.

PATENT

38. (Currently Amended) The context switch controller of claim 34 35, wherein each one of the plurality of storage groups comprises one or more storage elements.